



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,474	12/23/2003	Masahiko Matsukawa	21581-00312-US	8031

30678 7590 06/13/2006

CONNOLLY BOVE LODGE & HUTZ LLP
SUITE 800
1990 M STREET NW
WASHINGTON, DC 20036-3425

EXAMINER

ZHENG, LOIS L

ART UNIT	PAPER NUMBER
----------	--------------

1742

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/743,474

Applicant(s)

MATSUKAWA ET AL.

Examiner

Lois Zheng

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 4,5 and 7-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/3/04, 3/23/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Claims 3-4 are amended in view of the preliminary amendment filed 23 December 2003. New claims 6-12 are added in view of the preliminary amendment. Therefore, claims 1-12 are currently under examination.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 1-3 and 6, drawn to a composition, classified in class 148, subclass 243.
 - II. Claims 4-5 and 7-12, drawn to a product, classified in class 428, subclass 432.
3. Inventions II and I are related as product and composition used to make the product. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the composition as claimed can be used to form materially different product or (2) the product as claimed can be formed by using a materially different composition. In the instant case the coating composition as claimed can be used to form a surface treated non-metallic product. The surface-treated metal product as claimed can also be produced by using a materially different coating composition such as a phosphate containing coating composition.
4. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Art Unit: 1742

5. During a telephone conversation with Burton A Amernick on 7 June 2006 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-3 and 6. Affirmation of this election must be made by applicant in replying to this Office action. Claims 4-5 and 7-12 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seidel et al. US 5,976,272(Seidel) in view of Tomlinson US 5,441,580 (Tomlinson).

Seidel teaches a conversion coating composition comprising 2-25g/l of zinc 2-25g/l of manganese(abstract), 0.1-15g/l of cobalt, calcium and/or magnesium, 3-200mg/l of copper, 0.01-5g/l of complex fluoride of silicon, titanium or zirconium(col. 3 lines 3-20) and accelerators such as 2-5g/l of hydroxylamine, nitrobenzene sulfonic acid and chlorate, 0.2-1g/l of nitrite or 20-100ppm of hydrogen peroxide(col. 5 lines 12-15).

However, Seidel teaches not teach the presence of Group III metal ions such as Al, Ga or In.

Tomlinson teaches a conversion coating composition comprising zirconium, fluoride(col. 2 lines 43-48). Tomlinson further teaches the addition of aluminum in the amount of 10-1000ppm(col. 4 lines 20-25).

Therefore, it would have been obvious to one of ordinary skill in the art to have incorporated the 10-1000ppm of aluminum as taught by Tomlinson into the coating composition of Seidel in order to increase the rate of deposition of insoluble salts in the coating as taught by Tomlinson(col. 4 lines 20-25).

Regarding claims 1 and 3, the component concentrations in the coating solution of Seidel in view of Tomlinson overlap the claimed component concentrations as recited in instant claims 1 and 3. Therefore, a prima facie case of obviousness exists. See MPEP 2144.05. The selection of the claimed component concentrations from the coating solution component concentrations of Seidel in view of Tomlinson would have been obvious to one of ordinary skill in the art since Seidel in view of Tomlinson teach the same utilities in their disclosed coating solution component concentrations.

8. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seidel in view of Tomlinson, and further in view of Cuyler et al US 2002/0007872 A1 (Cuyler).

The teachings of Seidel in view of Tomlinson are discussed in paragraph 7 above. However, Seidel in view of Tomlinson do not explicitly teach the claimed silicon-containing compounds as recited in instant claim 2.

Cuyler teaches a conversion coating composition comprising silica(page 5 paragraph [0033]).

Regarding claim 2, it would have been obvious to one of ordinary skill in the art to have incorporated the silica as taught by Cuyler into the coating composition of Seidel in

Art Unit: 1742

view of Tomlinson in order to promote adhesion as taught by Cuyler (page 5, paragraph [0033]).

Regarding claim 6, the instant claim is rejected for the same reasons as stated in the rejection of instant claim 3 above.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-3 and 6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 10/743,387 as seen in US Patent Application Publication 2004/0163736 A1(US'736). Although the conflicting claims are not identical, they are not patentably distinct from each other because US'736 teaches a coating composition that is substantially the same as the claimed coating composition(i.e. zirconium, titanium,

Art Unit: 1742

fluorine and silane coupling agent, zinc, magnesium, calcium, aluminum, gallium, indium and copper).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lois Zheng whose telephone number is (571) 272-1248. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LLZ

ROY KING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700